

“AUTOMATISED ASSEMBLY OPERATING UNIT IN PARTICULAR FOR  
AEROSOL APPLIANCES”

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CLAIMS

5        1. Operating unit to generate a flow of air under pressure in aerosol therapy appliances, comprising a pump group (12) which includes a head (19), an electric motor and a fan, and a body enclosing said group and formed by two bottom and top shells, shells (13, 14) which are superimposed and close on a transversal plane on a level with their edges formed to self-centre one  
10        with the other, and where the head of the pump group has an air inlet duct (22) complete with filter (24) and an air outlet duct (23), and the motor is equipped with suspension elements in said body and is electrically connected to a socket and a switch supported by a plate with a fuse, characterised by the fact that the shells forming said body have means for receiving and holding the air  
15        inlet duct (22) with filter, the air outlet duct (23) and the plate with fuse, socket, electric switch following their overlapping for an automated assembly of the group.

2. Operating unit according to claim 1, in which the air inlet duct (22) and the air outlet duct (23) of the pump group are in planes at right-angular to each  
20        other.

3. Operating unit according to claims 1 and 2, in which the two shells (13,14) of the body have, on a level with their matching edges, two recesses forming together, when body is closed, a lateral lodging (31) to receive the air inlet duct (22) and the air filter, and two slots to form, with body closed, a  
25        lateral opening (33) to receive and hold the socket, switch and plate for

connecting the motor to the electric supply source, and in which one of the two shells, the top one (14), has at the top a recess with a hole at the bottom (34) made to receive the air outlet duct (23).

4. Operating unit according to claim 1, in which the air inlet duct (22) with  
5 filter (24) is lodged in the respective side seating (31) with interposition of a seal (32), and the air outlet duct is lodged in the respective hole (34) in the top of the body with interposition of a further seal (35).

5. Operating unit according to any of the previous claims, in which the bottom shell (13) of said body is equipped with feet at the bottom, and in  
10 which, inside said shell, on an axis with one of said legs, is shaped a protrusion (36) acting as a support for the head (19) of the pump group, said protrusion extending to rest against the bottom part of said head with interposition of a damper element (37) and so as to be in line and facing the air outlet duct (23).

15 6. Operating unit according to the previous claims, in which the filter is tightly fitted in the air inlet duct and has a longitudinal cavity partially obstructed by a pin.

7. Operating unit according to the previous claims, in which said filter can be removed from the outside of the body or shell, the filter being accessible  
20 using a tool to remove it through a slot provided in said body or shell and radially oriented to the seating hosting the air inlet duct.

8. Operating unit according to claim 1, in which the air inlet duct and the air outlet duct of the pump group are parallel, both horizontal placed and held between the matching edges of the two shells forming said body

9. Operating unit according to claim 8, in which the body forms a tool holder compartment closed by a cover, and the air inlet and outlet ducts of the pump group are on a wall of said compartment and are accessible through the latter.

- 5      10. An operating unit according to claim 1, in which the air inlet and outlet ducts of the pump group are parallel, both placed vertically and emerging on a level with the top of the top shell of said body.